LISTING OF CLAIMS:

What is claimed is:

1. (Currently Amended) A method in a data processing system for loading a class, the method comprising:

loading a class;

inserting an immutability flag into the class;

determining whether the class is immutable; and

setting the immutability flag if the class is immutable.

2. (Original) The method of claim 1, wherein the step of determining whether the class is immutable comprises:

parsing the bytecode of the class.

3. (Original) The method of claim 2, wherein the step of determining whether the class is immutable further comprises:

determining whether the class can be modified after it is created.

4. (Original) The method of claim 3, wherein the step of determining whether the class can be modified comprises determining whether all properties of the object are marked private.

5. (Original) The method of claim 3, wherein the step of determining whether the class can be modified comprises determining whether there are any non-private methods that update properties of the class.

6. (Original) The method of claim 1, further comprising:

receiving a request to invoke a server application;

examining an argument in the request;

if the argument is an object, determining whether the object is immutable; and

if the object is immutable, passing a reference to the object rather than a clone of the object.

7.   (Original) The method of claim 6, wherein the step of determining whether the object is immutable comprises:

  determining whether an immutability flag for the object is set.

8.   (Currently Amended) A method in a data processing system for invoking an object, the method comprising:

  receiving a request to invoke an object;

  examining an argument in the request;

  if the argument is an object, determining whether the object is immutable; and

  if the object is immutable, passing a reference to the object rather than a clone of the object.

9.   (Original) The method of claim 8, wherein the step of determining whether the object is immutable comprises:

  determining whether an immutability flag for the object is set.

10.   (Original) The method of claim 8, further comprising:

  if the object is not immutable, passing a clone of the object as the argument.

11.   (Original) An apparatus for loading a class, comprising:

  loading means for loading a class;

  insertion means for inserting an immutability flag into the class;

  first determination means for determining whether the class is immutable; and

  setting means for setting the immutability flag if the class is immutable.

12.   (Original) The apparatus of claim 11, wherein the first determination means comprises:

  parsing means for parsing the bytecode of the class.

13.   (Original) The apparatus of claim 12, wherein the first determination means further comprises:

second determination means for determining whether the class can be modified after it is created.

14. (Original) The apparatus of claim 13, wherein the second determination means comprises means for determining whether all properties of the object are marked private.

15. (Original) The apparatus of claim 13, wherein the second determination means comprises means for determining whether there are any non-private methods that update properties of the class.

16. (Original) The apparatus of claim 11, further comprising:
receipt means for receiving a request to invoke a server application;
examination means for examining an argument in the request;
third determination means for determining whether the object is immutable if the argument is an object; and
reference means for passing a reference to the object rather than a clone of the object if the object is immutable.

17. (Original) The apparatus of claim 16, wherein the third determination means comprises:
means for determining whether an immutability flag for the object is set.

18. (Original) An apparatus for invoking an object, comprising:
receipt means for receiving a request to invoke an object;
examination means for examining an argument in the request;
determination means for determining whether the object is immutable if the argument is an object; and
reference means for passing a reference to the object rather than a clone of the object if the object is immutable.

19.   (Original) The apparatus of claim 18, wherein the determination means comprises:

    means for determining whether an immutability flag for the object is set.

20.   (Original) The apparatus of claim 18, further comprising:

    clone means for passing a clone of the object as the argument if the object is not immutable.

21.   (Original) A computer program product, in a computer readable medium, for loading a class, comprising:

    instructions for loading a class;

    instructions for inserting an immutability flag into the class;

    instructions for determining whether the class is immutable; and

    instructions for setting the immutability flag if the class is immutable.

22.   (Original) A computer program product, in a computer readable medium, for invoking an object, comprising:

    instructions for receiving a request to invoke an object;

    instructions for examining an argument in the request;

    instructions for determining whether the object is immutable if the argument is an object; and

    instructions for passing a reference to the object rather than a clone of the object if the object is immutable.